filed February 28, 1997 Reply which was presented in response to the Office Action dated August 28, 1996. In the February 28, 1997 Reply, Applicants presented new claims 38-83 and cancelled claims 1-37. In this Supplemental Reply, Applicants have amended claims 38, 49, 50, 54, 57, 63, 77 and 78, as noted below.

Please amend the Application as follows:

In the Claims

1 ~~38~~. (Amended) An implant for use with an orthodontic appliance, the implant for use as an orthodontic or orthopedic load-bearing anchor in the mouth in creating a stabilizing or moving force, the implant comprising:

an elongated body having an in-bone portion connected to an above-bone portion, said in-bone portion and said above-bone portion each having an inner end and an outer end, the cross-sectional area of said above-bone portion inner end being greater than the cross-sectional area of said in-bone portion outer end, thereby forming a shoulder having a bone-contacting surface on said above-bone portion inner end capable of resting on a part of the bone surface adjacent to an opening in the bone when said implant is positioned in the mouth;

said elongated body further including a securing section for attaching an orthodontic appliance to said elongated body.

12 ~~49~~. (Amended) An implant including an orthodontic appliance, the implant for use as an orthodontic or orthopedic load-bearing anchor in the mouth in creating a stabilizing or moving force, the implant comprising:

an elongated body having an in-bone portion connected to an above-bone portion, said in-bone portion and said above-bone portion each having an inner end and an

outer end, the cross-sectional area of said above-bone portion inner end being greater than the cross-sectional area of said in-bone portion outer end, thereby forming a shoulder having a bone-contacting surface on said above-bone portion inner end capable of resting on a part of the bone surface adjacent to an opening in the bone when said implant is positioned in the mouth;

said implant further including an integrally formed orthodontic appliance extending from said above-bone portion of said elongated body.

13 ~~50.~~ (Amended) An implant for use with an orthodontic appliance, the implant for use as an orthodontic or orthopedic load-bearing anchor in the mouth in creating a stabilizing or moving force, the implant comprising:

B2 (concluded)

an elongated body having an inner end, an outer end, a securing section for attaching an orthodontic appliance to said implant, and a retention portion for assisting in securing said implant within an opening in a bone surface in the mouth;

said retention portion including a section of the elongated body extending from one of said inner end and said outer end at least part-way toward the other of said inner end and said outer end, said retention portion further including a tapered bore and at least one longitudinal cut, said tapered bore and said longitudinal cut extending from said one of said inner and outer ends with said tapered bore having a cross-sectional area which gets smaller in the direction of said inner end, whereby when said implant is positioned in an opening in a bone surface of the mouth, and an orthodontic appliance having a corresponding fastening section is attached to said elongated body, a portion of the fastening section biases against a portion of the sidewall of said tapered bore and moves said retention portion radially outward thereby securing said implant in the opening in the bone surface.

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17 54. (Amended) An implant for use with an orthodontic appliance, the implant for use as an orthodontic or orthopedic load-bearing anchor in the mouth in creating a stabilizing or moving force, the implant comprising:

an elongated body having an inner end, an outer end, a securing section for attaching an orthodontic appliance to said implant, and a retention portion for assisting in securing said implant within an opening in a bone surface in the mouth;

B3

said retention portion including a section of the elongated body extending from one of said inner end and said outer end at least part-way toward the other of said inner end and said outer end, said retention portion being formed of a shape-memory alloy and including a bore and at least two longitudinal cuts, said bore and said longitudinal cuts extending from said one of said inner end and said outer end at least part-way toward said other of said inner end and said outer end, said longitudinal cuts forming at least two leg portions, said retention portion capable of assuming a predetermined shape in which said leg portions angle slightly radially outward when said retention portion reaches an ambient mouth temperature, thereby securing said implant in an opening in a bone surface in the mouth.

20 57. (Amended) An anchorage system including an onplant and an implant for use as an orthodontic or orthopedic load-bearing anchor in creating a stabilizing or moving force in the mouth, the anchorage system comprising:

B4

an onplant having a bone-facing surface, an opposite face, and a hole extending through said onplant at an angle substantially perpendicular to said bone-facing surface; and

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an implant for use in affixing said onplant to a bone surface in the mouth, said implant having an elongated body including an inner end and an outer end, a portion of said elongated body including said inner end capable of being positioned through said hole and in an opening in a bone surface in the mouth.

B4 (concluded)

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26 63. (Amended) A method of forming an orthodontic or orthopedic load-bearing anchor for use with an orthodontic appliance, the anchor being positioned in a non-occlusal surface of the mouth for use in creating a stabilizing or moving force, comprising the steps of:

providing an implant having an elongated body which includes an inner end, an outer end, an outer circumferential surface between said inner and outer ends, and a securing section for attaching an orthodontic appliance to said elongated body; and

B5

positioning at least a part of said elongated body, including said inner end, in an opening in a bone surface selected from the group consisting of the buccal, labial, lingual and palatal surfaces of the maxillary jawbone and the buccal, labial and lingual surfaces of the mandibular jawbone, thereby forming an anchor in a non-occlusal surface of the mouth for use in creating a stabilizing or moving force.

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40 77. (Amended) A method of forming an orthodontic or orthopedic load-bearing anchor including an orthodontic appliance in a non-occlusal surface of the mouth for use in creating a stabilizing or moving force, comprising the steps of:

B6

providing an implant having an elongated body and an integrally formed orthodontic appliance, said elongated body including an inner end and an outer end; and

positioning at least a part of said elongated body, including said inner end, in an opening in a bone surface selected from the group consisting of the buccal, labial, lingual

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